

METHOD AND APPARATUS TO QUIESCE A PORTION OF A
SIMULTANEOUS MULTITHREADED CENTRAL PROCESSING UNIT

ABSTRACT OF THE DISCLOSURE

5 Execution of a program's instructions in a simultaneous multithreaded
processor is halted while the program is waiting for one or more events to occur by
first arming an event monitor upon an arm instruction, that is, identifying to the
event monitor one or more events to be monitored, such as a modification to a value
or state of an identified memory location or group of locations, and setting a watch
10 flag to indicate enable the event monitor. Upon execution of a quiesce request
instruction, the program quiesces if the watch flag is set, and a timer is started.
Upon observation by the event monitor of an identified event, or upon expiration of
the timer, the watch flag is cleared and execution of the program resumes.

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